

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION DR-413

Effective July 1, 2010

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **July 2013**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Fiberglass Sliding Glass Doors, Non-impact Resistant, manufactured by

Infinity from Marvin Windows and Doors
1616 43rd Street NW
Fargo, North Dakota
Telephone: (701) 277-0522

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The sliding glass doors are fiberglass sliding glass doors. The fiberglass sliding glass doors evaluated in this report are non-impact resistant doors. This product evaluation report is for fiberglass sliding glass doors based on the following tested constructions:

General Description:

System	Description	Label Rating
1	Fiberglass Sliding Patio Door; 9080; (OXO)	SD-LC25 107 x 96
2	Fiberglass Sliding Patio Door; 9080; (XOO)	SD-LC25 107 x 96
3	Fiberglass Sliding Patio Door; 8080; (XO)	SD-LC25 96 x 96
4	Fiberglass Sliding Patio Door; 9068; (XOO)	SD-LC30 107 x 82
5	Fiberglass Sliding Patio Door; 9068; (OXO)	SD-LC30 107 x 82
6	Fiberglass Sliding Patio Door; 8068; (XO)	SD-LC30 95 x 82

Component Dimensions:

System	Overall Door Size	Operable Panel Size	Fixed Panel Daylight Opening Size
1	106 1/2" x 95 1/2"	35 5/8" x 92 5/8"	31" x 88"
2	106 1/2" x 95 1/2"	35 5/8" x 92 5/8"	31" x 88"
3	95" x 95 1/2"	47 5/8" x 92 5/8"	43" x 88"
4	106 1/2" x 82"	35 5/8" x 79 1/8"	31" x 74 1/2"
5	106 1/2" x 82"	35 5/8" x 79 1/8"	31" x 74 1/2"
6	95" x 82"	47 5/8" x 79 1/8"	43" x 74 1/2"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	GM-1
2	IG-1	GM-1
3	IG-1	GM-1
4	IG-2	GM-1
5	IG-1	GM-1
6	IG-2	GM-1

Note: ¹ See the "Glass Construction Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

IG-1: The panels contain a sealed insulating glass unit. The sealed insulating glass units are comprised of two $\frac{5}{32}$ " fully tempered glass lites separated by a desiccant-filled metal spacer system. The glass thickness in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

IG-2: The panels contain a sealed insulating glass unit. The sealed insulating glass units are comprised of two double strength ($\frac{1}{8}$ ") fully tempered glass lites separated by a desiccant-filled metal spacer system. The glass thickness in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass units are set from the interior against silicone on the exterior. Fiberglass stops are secured on the interior with two rows of glazing tape, applied to both the stiles and the rails. Two additional silicone seals are utilized, one between the insulating glass unit and the interior fiberglass stop and one between the exterior fiberglass and the interior fiberglass stop, just outboard of the glazing tape.

Frame Construction: The frame members are manufactured from fiberglass on the exterior and foam PVC trim on the interior. The fiberglass is mitered at the top joints and secured with two corner keys per joint and screws. The exterior corner keys are injected with sealant. The sill corner construction is butt joint with one corner key per joint. Each corner key is injected with sealant. Two fasteners are applied to each corner key through the jamb and four fasteners are applied to the corner key through the sill. The foam PVC members are snap-fit to the fiberglass members.

Panel Construction: The panel members are manufactured from fiberglass on the exterior and the interior. The panel corners are mitered and secured with a corner key and screws. The interior fiberglass stiles and rails are mitered and secured with corner keys injected with hot melt. The stationary panels are positioned into the frame jamb channels and secured on the sill with screws. The meeting stiles of the stationary panels are secured at the head with an angle bracket which is secured to the stile and to the header with screws. A wood mullion is secured to the interior of the lock side of the stationary panel with screws placed through the wood mullion into the stationary stile.

Hardware:

- Steel roller assembly; Two (2) required; Located on the operating panel. At the bottom rail.
- Multi-point panel lock; One (1) required; Located on the bottom rail of the locking stile.
- Panel lock keeper; One (1) required; Located on the fixed panel adjacent to the panel lock.

Reinforcement:

Systems 1, 2, and 3: Two aluminum stiffeners at the meeting stile.

Systems 4, 5, and 6: None.

Product Identification: A certification program label (WDMA Hallmark Certified) will be affixed to the assembly. The certification program label includes the manufacturer's name; the product name: **Infinity Sliding Patio Door**; performance characteristics; the approved inspection agency (WDMA); and the following applicable standards: AAMA/WDMA/CSA 101/I.S.2/A440-05 and AAMA/WDMA/CSA 101/I.S.2/A440-08.

LIMITATIONS

Design pressures (DP):

System	Overall Width (in.)	Overall Height (in.)	Design Pressure (psf)
1	106 ½	95 ½	± 25
2	106 ½	95 ½	± 25
3	95	95 ½	± 25
4	106 ½	82	± 30
5	106 ½	82	± 30
6	95	82	± 30

Impact Resistance: These door assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These door assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Door assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The door assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions and this evaluation report. Detailed installation instructions and drawings are available from the manufacturer.

Installation: The wood wall framing members shall be minimum Southern Yellow Pine lumber. The door assembly is secured to the wall framing using the nailing fin and the frame. The nailing fin is secured to the wall framing with minimum 12 gauge roofing nails (minimum 2" long smooth shank) spaced approximately 6 inches from each corner and approximately 10 inches on center along perimeter of the door. Two (2) No. 8 x 3" screws are utilized along the header at the meeting stile. Two (2) No. 8 x 3" screws are utilized along each side jamb, approximately 24 inches from each end. Four (4) screws are utilized through the keeper into the wall framing. One (1) No. 8 x 3" screw is utilized through the PVC sill liner into the sub floor. For concrete foundations minimum ¾" diameter concrete anchors shall be used. All fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.